

# **PROFILES OF THE FOOD SECURITY AND NUTRITIONAL STATUS OF ANE POPULATIONS**

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## PROFILES OF THE FOOD SECURITY AND NUTRITIONAL STATUS OF ANE POPULATIONS

This report provides a brief summary of the food security and nutritional status of the populations of Asia and the Near East (ANE) countries. Food security is defined as “regular access (either through production or purchasing power) to sufficient food for a healthy and productive life” (USAID’s Food Aid and Food Security Policy Paper, 1995) and will depend upon the availability of, access to and utilization of foods. Food security is an important indicator of the level of poverty within a country. Food insecurity can be a cause of political instability and environmental degradation.

This report begins with a brief summary and a map of recent hunger hotspots. Section Two provides summary tables to show the relative ranking of food security among ANE countries. Table 1 ranks countries according to the *percentage of the population* suffering from undernourishment<sup>1</sup> while Table 2 ranks countries according to the *number of people* undernourished. Table 3 ranks countries according to the prevalence of child malnutrition<sup>2</sup>. Section Three summarizes briefly the status of each country.

### 1. HUNGER HOTSPOTS IN ASIA AND THE NEAR EAST

Afghanistan, the Democratic People’s Republic of Korea, Mongolia, Jordan and Cambodia have been facing food emergencies. The causes of food shortages in Afghanistan, Mongolia and Korea DPR are persistent drought and harsh winters. Jordan, has experienced three consecutive years of drought while Cambodia’s most food insecure are still suffering the effects of major flooding the wet season of 2000. Drought in regions of China present further concern with the FAO listing China as a country with “unfavorable prospects for current crops” (Food Crops and Shortages, FAO, April 2001).

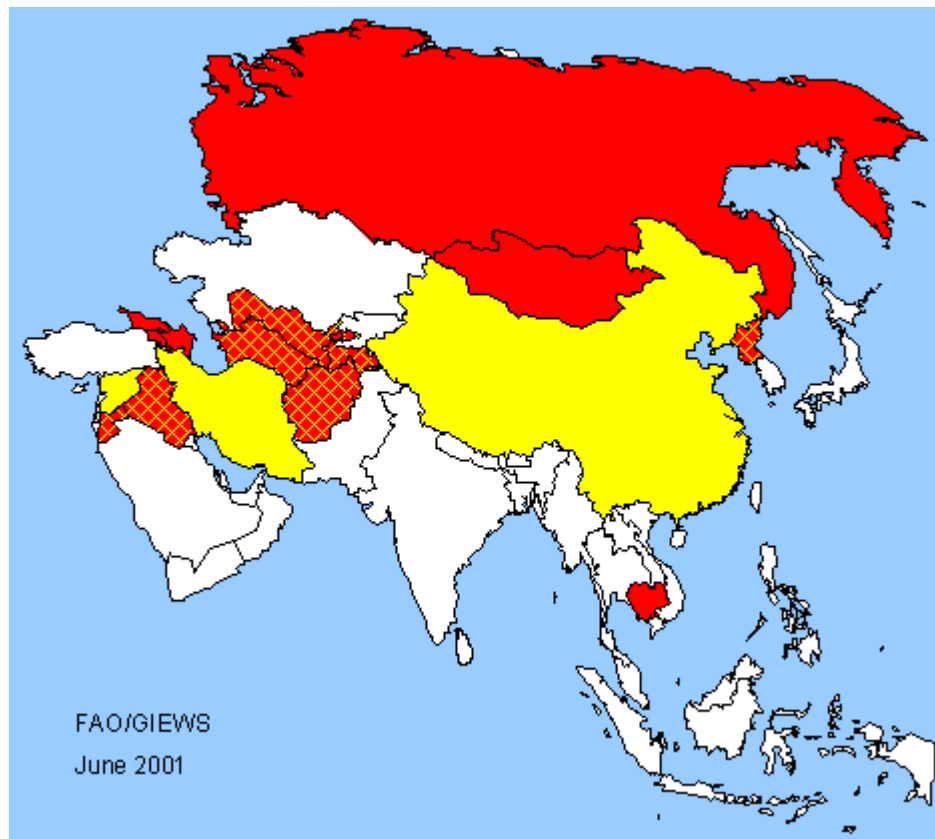
In addition to food emergencies, Asia’s inhabitants are among the world’s most food insecure. The Committee on World Food Security estimated that from 1996-98, 174 million children under the age of five in the developing world are malnourished, over **two-thirds of these children live in Asia**, especially South Asia. Moreover, micronutrient deficiencies are a serious public health problem and have been shown to increase the risk of illness, death and impair cognitive development and growth.

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<sup>1</sup> Undernourishment represents insufficient calorie intake. The specific caloric levels below which undernourishment occurs vary according to countries based on calculations specific to a country such as body mass index.

<sup>2</sup> Malnutrition is broader in definition than undernourishment and covers protein, caloric, vitamin and mineral deficiencies.

Figure 1: Map of Crop Prospects and Food Supply Situation for Asia.  
Source: FAO's Global Information and Early Warning System on Agriculture



- Food supply shortfall requiring exceptional assistance
- Unfavorable crop prospects and food supply shortfall
- Unfavorable prospects for current crops

## 2. SUMMARY TABLES

TABLE 1: Prevalence of Undernourishment 1996-1998

CATEGORY	COUNTRY	PROPORTION OF THE POPULATION (%)
35% OR MORE		
	Afghanistan	70
	Korea DPR	57
	Mongolia	45
	Bangladesh	38
	Yemen	35
20-34%		
	Cambodia	33
	Laos	29
	Papua New Guinea	29
	Nepal	28
	Sri Lanka	25
	Vietnam	22
	India	21
	Philippines	21
	Thailand	21
	Pakistan	20
5-19%		
	Mainland China & Taiwan	11
	Burma	7
	Indonesia	6
	Algeria	5
	Morocco	5
	Jordan	5
2.5-4%		
	Egypt	4
Less than 2.5%		
	Korea Republic	
	Malaysia	
	Lebanon	
	Tunisia	

Source: Committee on World Food Security (2001). Assessment of the World Food Security Situation. FAO.

TABLE 2: Number of Undernourished 1996-1998

COUNTRY	MILLIONS OF PEOPLE
India	207.6
Mainland China & Taiwan	140.1
Bangladesh	46.8
Pakistan	28.9
Vietnam	16.5
Philippines	15.2
Afghanistan	14.6
Korea DPR	13.2
Indonesia	12.3
Thailand	12.2
Nepal	6.2
Yemen	5.7
Sri Lanka	4.5
Cambodia	3.4
Burma	3.1
Egypt	2.6
Laos	1.5
Algeria	1.4
Morocco	1.4
Papua New Guinea	1.3
Mongolia	1.1
Korea Republic	0.5
Malaysia	0.5
Jordan	0.2
Lebanon	0.1
Tunisia	0.1

Source: Committee on World Food Security (2001). Assessment of the World Food Security Situation. FAO.

TABLE 3: Prevalence of Child Malnutrition 1992-1998

COUNTRY	PROPORTION OF CHILDREN UNDER 5 YEARS OF AGE (%)
Nepal	57
Bangladesh	56
Yemen	46
Burma	43
Viet Nam	40
Laos	40
Sri Lanka	38
Pakistan	38
Indonesia	34
Philippines	30
Papua New Guinea	30
Malaysia	20
Iran	16
Mainland China and Taiwan	16
Syria	13
Algeria	13
Egypt	12
Morocco	10
Tunisia	9
Mongolia	9
Jordan	5
Lebanon	3

Source: Committee on World Food Security (2001). Assessment of the World Food Security Situation. FAO.

N.B. Data were not given for all countries, for example, India.

### 3. COUNTRY PROFILES

#### AFGHANISTAN

Continuing civil conflicts and two consecutive years of drought in Afghanistan have caused severe food shortages for more than three million people. Prior to the drought (1996-1998), 70% of the people were already undernourished (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). Current conditions are exacerbating levels of food insecurity.

Afghanistan's grain production has fallen by more than 50% in the last two years and now meets less than half of the total national grain requirements (Assistance Afghanistan, 2001). Total cereal production in 2000 was estimated to be 1.82 million tons about 44 percent and 53 percent below the 1999 and 1998 crops, respectively. Current harvests are expected to continue to be poor (Food Crops and Shortages, FAO, April 2001). The drought has also reduced the amount of vegetation available for livestock causing great losses of animals. As a result, people are moving from the remote areas of Ghor, Badghis and Faryab Provinces to camps at the edge of Herat, the main urban center in the west. Starvation-related deaths have occurred (FAO Global Information and Early Warning System on Food and Agriculture, 2000). Furthermore, the continuing civil conflict has resulted in the destruction of irrigation systems and other infrastructure necessary for agricultural production and distribution. This destruction will also hamper future improvements in production when rains do arrive.

#### BANGLADESH

In June 2001, the Government of Bangladesh announced a bumper rice crop and the attainment of food self-sufficiency for this year. The country has experienced a series of good harvests following the devastating monsoon floods of 1998 (Food Crops and Shortages, FAO, April 2001).

Data from 1996-1998 estimate that 38% of the population is undernourished (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). Rates of malnutrition in Bangladesh are among the highest in the world. More than 54% of preschool-age children, equivalent to more than 9.5 million children, are stunted, more than 17% are wasted and 56% are underweight<sup>3</sup>. The prevalence of underweight ranged

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<sup>3</sup> **Stunting** is determined by a child's **height for age**. It may result from a lack of adequate nutrition over a long period of time or a recurrent or chronic illness.

**Wasting** is determined by a child's **weight for height**. It indicates a lack of adequate nutrition in the period immediately before the survey and/or may be the result of recent illness or of seasonal variations in the food supply.

The degree of **underweight** is determined by a child's **weight for age**. A child may be underweight due to stunting, wasting or both.

from 49.8% in Khulna to 64.0% in Sylhet. (Nutrition Country Profile – Bangladesh. 25 March 1999, FAO).

Food insecurity arises from the rapid population growth and the limited availability of arable land. Re-occurring disasters cause further insecurity of food production. Recently the Government of Bangladesh has been promoting non-cereal food production and consumption along with food self-sufficiency.

Over 80% of households depend on open water fisheries for food; however, the area of these fisheries has been declining due to decreasing amounts of water available during the dry season. Overall, there has been a 30-40% decline in fish production and families now are consuming less protein than in the past.

People's diets are highly dependent on starchy staples and lack important micronutrients. As a result, children also suffer from high rates of micronutrient deficiencies particularly vitamin A, iron, iodine and zinc deficiency. A Helen Keller International survey found that in 1997, about 22% of children under five and 49% of pregnant women had subclinical vitamin A deficiency. Bangladesh has made progress in reducing vitamin A deficiency among preschool children over the past 15 years; however, consumption of vitamin A-rich foods is still low, suggesting that the underlying causes of vitamin A deficiency require further attention and support. Anemia is also highly prevalent among children in Bangladesh and a few programs have been initiated to improve their iron status. Malnutrition among women is also extremely prevalent in Bangladesh. More than 50 percent of women suffer from chronic energy deficiency (Nutrition Country Profile – Bangladesh. 25 March 1999, FAO).

## **BURMA**

The FAO does not list Burma as in danger of any food crop shortages for 2001 (Food Crops and Shortages, FAO, April 2001). While The World Food Committee estimated that only 7% of the Burmese population is undernourished, other data indicate that malnutrition among children is a very serious problem. About one in three children under the age of five is underweight, nearly half are stunted and one in twelve children show signs of chronic wasting (Committee on World Food Security: Assessment of the World Food Security Situation, FAO, 2001). The prevalence of stunting indicates that many Burmese children have experienced chronic and long-term food shortages.

## **CAMBODIA**

Cambodia is listed as a country with a “food supply shortfall requiring exceptional assistance”. The reason for which are the floods that destroyed crops during the 2000 wet season. Despite the floods, the harvest for the year was good with yields above those of 1999 which was a bumper year. However, for those people already food insecure, the floods made them more vulnerable to food shortages. The FAO estimates that 3 million



people are food insecure due to the floods. Of the 3 million, 500,000 people are believed to be the most food insecure. In order to reach these people and allow them to recover, the FAO has listed Cambodia as needing “exceptional assistance” which is partially being met through an emergency operation (Food Crops and Shortages, FAO, June 2001).

Even prior to the flooding, 33% of the population is undernourished. The nutritional status of children is poor with 52% underweight, 56% stunted and 13%, wasted (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). A UNICEF/World Food Program Survey found that 28.5% of women between the ages of 18 and 49 were undernourished. Women living near forests were most affected as 60% suffer from chronic energy deficiency (Nutrition Country Profile – Cambodia. 24 February 1999, FAO).

The three most common micronutrient deficiencies in Cambodia are vitamin A (around 5%), iron (around 70%) and iodine (around 12%) (Cambodia Demographic and Health Profile by Randy Kolstad). Vitamin A capsule coverage among children aged 6-59 months ranged from 10-55%. Helen Keller International has found that the rates of anemia among women and preschool children are among the highest in the Asia-Pacific region. By age two, 7 out of 10 children are anemic. In non-pregnant women anemia prevalence ranged from 45-65% and among pregnant women it ranged from 50-80%. The prevalence of goiter resulting from iodine deficiency was 12% in school children aged 8 to 12 years. The provinces of Siem Reap, Ratanakini, Bantey Meanchey and Svay Rieng were found to have severe iodine deficiency disorders with more than 30% of children 8-12 years old affected.

The causes of food insecurity and malnutrition include a lack of availability and access to food as well as a lack of diversity within diets. Farm productivity is low and the rural poor have no food reserves. The poor are becoming disenfranchised and more food insecure as they are forced off their farmlands and are losing access to the fisheries and forests upon which their livelihoods depend (Background and Talking Points, Cambodia Consultative Group Meeting, Tokyo Japan, June 12-13, 2001).

## **CHINA**

Drought has been reducing yields in China and has affected more than 20 million hectares. The FAO lists China as having unfavorable prospects for current crops. Floods in southern China affected 1.7 million hectares (Food Crops and Shortages, FAO, June 2001).

There is a great deal of variation in nutritional status across China's provinces. Eleven percent of the population is considered undernourished. The prevalence of children under the age of five who are underweight ranged from 3% in Beijing to 39% in the province of Hainan while that of stunting ranged from 7% in Beijing to 56% in of Guizhou. According to the World Health Organization classification, the children in the provinces of Fujian, Jianxi, Hunan, Guangxi, Hainan, Sichuan, Guizhou, Yunnan, Qinghai and

Xinjiang were found to be highly affected by stunting (>40%) and those in Guanxi and Hainan also showed a prevalence of underweight >30%. In the provinces of Guangxi and Hainan, more than 25% of the adults were affected by chronic energy deficiency. Twenty-three percent of women above 18 years of age suffer from anemia. The prevalence of anemia ranges across provinces from 2% in Nei Mongol Zizhiqu to 52% in Shanghai. The Chinese diet is deficient in iodine but China has started a campaign for the Universal Iodization of Salt (Nutrition Country Profile - China 19 April 1999, FAO).

## **EGYPT**

Since 1987, trade liberalization has occurred in the agricultural sector with the result of increasing production and self-sufficiency. About 4% of the population is undernourished with 12% of children under the age of five being underweight. Twenty-five percent of children were estimated to be stunted and 6% wasted (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001).

## **INDIA**

Drought in some of the country's main wheat growing states is expected to reduce the crop by about 5 to 7 million tons from last year's record crop of 75.5 million tons. The area under wheat is about three million hectares less than the year 2000's area of 27.4 million hectares. The decline in crop area occurs mainly in rainfed states like Madhya Pradesh, Gujarat, Rajasthan and parts of Maharashtra. The crop in Punjab, Haryana and Uttar Pradesh is expected to be satisfactory (Food Crops and Shortages, FAO, April 2001). Normal rainfall occurred from March to May 2001 in Rajasthan, Madhya Pradesh, Chattisgarh, and Orissa, but rainfall in Gujarat, Saurashtra and Kutch are deficient (Food Crops and Shortages, FAO, June 2001).

Local chickpea production is also down due to the drought. India will need 2 million tons of imported chickpeas to make up for this decline. Such deficits are of concern for the food security of the poor because they depend upon chickpeas as their protein source. The fall in production could effect about a third of the population (Future Harvest, June 2001).

Nutritional status of individuals varies across states depending on their specific socio-economic and biophysical characteristics. For children 1-5 years of age, the percentage of those underweight ranged from 13% in the State Meghalaya to 77% in Gujarat. More than half of the adults in Karnataka, Gujarat, Madhya Pradesh and Orissa suffer from malnutrition. Child and adult malnutrition overlap in Gujarat, Orissa, Arunachal Pradesh, Karnataka, Maharashtra, Madhya Pradesh and Andhra Pradesh (Nutrition Country Profile – India. 24 June 1998, FAO).

Record stocks of wheat and rice are being stored in India, yet millions remain hungry. It has been reported that the Government of India's Public Distribution System and Integrated Child Development Scheme have been ineffective and that during the drought

of 2000, the amount of grain distributed actually decreased due to distorted policies (Times of India, May 18, 2001). The government is working to improve food distribution to those malnourished. Calls have also been made to improve the food self-sufficiency of the poor through “soil and water conservation measures including more greenery in and around villages” (Times of India, May 18, 2001).

## **INDONESIA**

There have been good harvests of rice in Indonesia and the government has announced that it would not import rice in 2001. However, the violent civil unrest in parts of the country has raised concerns for food supply in these areas and of internally displaced persons (Food Crops and Shortages, FAO, June 2001).

Regarding the nutritional status of the population, it is estimated that six percent are undernourished. Thirty-four percent of children under the age of five are estimated to be underweight, while 43% show signs of stunting and 6% show signs of wasting (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). Over the years, there have been improvements in food security due to economic growth. The adoption of integrated pest management techniques has also contributed to the success of rice harvests.

## **JORDAN**

The FAO lists Jordan as having “unfavorable crop prospects and a food supply shortfall” for 2001. The 2001 wheat and barley harvests are expected to be below average because of three consecutive years of drought. Any rainfall has been erratic. Livestock production has also declined. Small-scale sheep herders have been particularly affected. An FAO Mission of September 2000 appealed for seeds and other inputs (Food Crops and Shortages, FAO, April 2001).

From 1996 to 1998, approximately 5% of Jordan’s population were undernourished representing about 200,000 people. About 6% of children were found to be underweight in 1995, 16% stunted and 3% wasted (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001).

## **KOREA - DEMOCRATIC PEOPLE’S REPUBLIC**

Korea DPR continues to suffer from a shortage of food supply given recent years of consecutive droughts, harsh winters, spring floods and the effects of the centrally planned economy. Furthermore, the area of arable land is small with a short growing season and a shortage of fertilizers. In November, 2000, an FAO/World Food Program Crop and Food Supply Assessment Mission estimated that to meet minimum food needs until October 2001, North Korea would need 1.87 million tons of grain (Food Crops and Shortages, FAO, April 2001).

According to the CIA World Factbook, “Even with aid, malnutrition rates are among the world's highest and estimates of mortality range in the hundreds of thousands as a direct result of starvation or famine-related diseases”.

## **LAOS**

In September 2000, flooding ruined monsoon rice crops in central and southern parts of Laos. In February, 2001, the FAO/World Food Program Crop and Food Supply Assessment Mission evaluated the rice supply and the need for food aid. This assessment found that despite the flood losses, production was “generally favorable” and that existing production and some food aid should cover estimated needs depending upon the dry season harvest. The poor, however, are likely to suffer from food shortages due to problems of transport and their remote locations. These poor are subsistence farmers who have little access to cash income to buy food and whose agricultural systems do not contain the diversity needed to be resilient against crop failures. A World Food Program vulnerability analysis found that “approximately 450,000 people were most affected by the floods last year, of whom an estimated 390,000 do not have access to dry season cropping”. As of February 2001, food aid has reached about 111,000 people (Food Crops and Shortages, FAO, April 2001).

FAO data from 1996-1998 estimate that 29% of the population are undernourished. Forty percent of the children were found to be underweight, 47% were stunted and 11% were found to suffer from wasting (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001).

## **MONGOLIA**

Mongolia is a hunger hotspot with food shortages requiring exceptional assistance (Food Crops and Shortages, FAO, April 2001). Two consecutive record cold winters have killed large numbers of livestock upon which nomadic herders are dependent for their survival. The summer between these two winters was one of drought which reduced the amount of vegetation available for animals to eat. About one-third of Mongolia's population depend upon livestock for their livelihoods. Livestock are not only a major source of household income, but also a source of foreign exchange earnings. The 1999-2000 winter affected 450,000 herders and killed 3 million animals (UN Office for the Coordination of Humanitarian Affairs 30 Jan 2001). The 2000-2001 winter affected at least 350,000 herders. Livestock losses for the 2000-2001 are estimated to have reached 2 million animals due to the severe weather conditions and outbreaks of foot and mouth disease and rabies (Food Crops and Shortages, FAO, June 2001). Livestock prices have increased as much as 40% causing inflation which in turn prevents the poor from buying food. There is also a shortage of milk, an important protein source for the poor (Food Crops and Shortages, FAO, April 2001).

These food shortages exacerbate an already poor and food insecure population of which 45% were estimated to be undernourished from 1996-1998 (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). This food insecurity is due to changes in the economic status of the population as the country moved from a centrally-planned economy to one that is market-driven. The change has resulted in unemployment and the shutting down of state-run industries like commercial dairy operations. There has also been a serious fall in grain production from 700,000 tons in 1990 to 238,000 tons in 1997 (Memorandum of Understanding Food Security and Nutrition, the Government of Mongolia and the United Nations System). Those who are most food insecure are the unemployed, the elderly, female-headed households, children, pensioners and small herders. There are high levels of chronic malnutrition among nomadic herders. The FAO estimates that in 1995, 12% of the children were underweight, 26% were stunted and 2% were wasted (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). Those stunted children are suffering from chronic malnutrition, rickets, or some combination of the two. One-half of children do have clinical signs of rickets. About 40 percent of children and at least 20 percent of pregnant mothers suffer from anemia. Iodine deficiency is widespread where in some areas, 40 to 60 percent of the population display some degree of goiter (Memorandum of Understanding Food Security and Nutrition, the Government of Mongolia and the United Nations System).

## **MOROCCO**

Morocco's system of dams supplies about 1 million hectares of irrigated fields. Government assistance to water management and agriculture has contributed to the food security of the country. About 5% of the population is reported to be undernourished. Data collected in 1995 show that 10% of children are underweight, 24% are stunted and 2% exhibited wasting (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). About 41% of children under five suffer from vitamin A deficiency (OMNI, 1997).

## **NEPAL**

FAO estimates that the proportion of the population undernourished is 28%. In Nepal, 47% of the children under age five are underweight, 49% are stunted and 11% are wasted (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001).

Nutritional deficiencies in Nepal are prevalent in isolated hill and mountain districts where the only food available is that produced through subsistence farming. The diet, dependent on starchy staples, is poor. Seasonal food shortages, for example of fruits and fresh vegetables, contribute to malnutrition. Low levels of consumption of these foods result in iron and Vitamin A deficiencies.

## **PAKISTAN**

Pakistan has experienced three consecutive years of drought resulting in a significantly reduced grain harvests in certain areas such as Balochistan and Sindh Provinces. Not only has there been little rainfall from the monsoons, but there is also a lack of glacier and snowmelt. This melting is the main source of water for irrigated crops. The rainfed crop is also expected to be poor. Food and water shortages are increasing and the situation for the most vulnerable groups is becoming critical (Food Crops and Shortages, FAO, April 2001). There was a “bumper crop” of wheat produced in the Punjab in 2000 due to high inputs of fertilizers and the use of quality seeds (Food Crops and Shortages, FAO, November 2000). The surplus from the 2000 harvest will be used to make of for shortfalls in the 2001 harvest critical (Food Crops and Shortages, FAO, June 2001).

Data from 1996-1998 estimate that 20% of Pakistan’s population are undernourished (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). Almost 40% of children are underweight. Over half the children are affected by stunting and about 9% by wasting (Nutrition Country Profile – Pakistan 29 May 1998, FAO). Lower socio-economic status and poor access to basic health services are underlying causes of malnutrition. The consumption of fruits and vegetables, fish and meat remains very low with fruit and fresh vegetable consumption dependent upon seasonal availability.

## **PAPUA NEW GUINEA**

About 29% of Papua New Guinea’s population is undernourished. FAO data for 1995 indicate that for children under the age of five, 30% are underweight, 43% are stunted and 6% are suffering from wasting (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). The prevalence of chronic energy deficiency in adults in 1996 was 12.4% for women and 4.1% for men. Iron deficiency anemia is known to be widespread in Papua New Guinea, although no national representative survey has been performed. Iodine deficit disorder and vitamin A deficiency have also been noted (Nutrition Country Profile – Papua New Guinea. 12 December 1999, FAO).

## **PHILIPPINES**

Rice production in the Philippines has been increasing; however, the country is not self-sufficient and imports rice to meet shortfalls and for storage as a buffer (Food Crops and Shortages, FAO, April 2001).

About 21% of the population are undernourished. Data from 1995 found that 30% of children under five were underweight, 33% were stunted and 8% were wasted (Committee on World Food Security. Assessment of the World Food Security Situation,

FAO, 2001). In the past, rural coastal communities received 80% of their animal protein from fish. UNICEF is now finding for the first time that these rural coastal communities are reporting protein-calorie deficiencies. Given declines in fisheries, it is estimated that protein consumption could decrease by more than half by 2010 (Coastal Resources Management Project Philippines, 1999, Coastal Resource Management for Food Security).

## **SRI LANKA**

A 1995 nutritional status survey of Sri Lanka found that the prevalence of stunting in children under five years of age was 20%, that of wasting, 13% and of those underweight, 33%. Children in the Western Province have a better nutritional status than those children in other provinces due to their access to health care. The prevalence of chronic energy deficiency among adults is more than 33% of women and nearly 37% of men. About 45% of pre-school children, 58% of children 5 to 11 years old, 36% of adolescents and 45% of non-pregnant women suffer from anemia. Women 18-45 years old seem to be the most affected and significant inter-provincial variations in the prevalence of anemia were observed in this group. More than 30% of pre-school children are deficient in vitamin A and nearly 19% of the population is iodine deficient (Nutrition Country Profile - Sri Lanka 10 February 1999, FAO).

## **THAILAND**

Thailand exported 6.54 million tons of rice in 2000. A slight decline in exports is predicted for 2001 due to decreasing demand (Food Crops and Shortages, FAO, April 2001). Despite being an exporter of rice, twenty-one percent of the population is undernourished. In 1995 around 25% of children under five years of age were underweight, 22% were stunted and 5% suffered from wasting (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001). The case of Thailand illustrates that agricultural production does not necessarily ensure a well-nourished population.

## **VIETNAM**

In 2000, 3.7 million tons of rice were exported. Despite rice exports, 22% of the population is undernourished representing a lack of sufficient calorie intake. The prevalence of underweight children under 5 years of age is 40%. Thirty-six percent of children show signs of stunting while 10% suffer from wasting. Iron deficiency anemia affects 45% of children under 5 years of age, 40% of non-pregnant women and 53% pregnant women are anemic (Nutrition Country Profile – Vietnam. 2 March 1999, FAO, Rome). The causes of malnutrition in Vietnam is the uncertainty of food supplies in rural areas and poor diets lacking a diversity of food types.

## **WEST BANK AND GAZA**

It is believed that in the years following the Palestinian Intifada of 1987, nutritional status has declined causing malnutrition among some poor children. Border closures affecting labor and trade have caused high rates of unemployment and the consequent inability of many households to purchase sufficient food. In 1996, a health survey found that in the West Bank 6.7% of the children suffered from stunting, 2.3% from wasting and 3.6% were underweight. In Gaza for the same year, 8.2% of the children suffered from stunting, 3.7% from wasting and 4.7% were underweight (Palestinian Central Bureau of Statistics, 1996). Furthermore, the overall quality of the Palestinian diet may be declining due to the consumption of processed and tinned foods attributed to a lack of knowledge of a balanced diet (Applied Research Institute, Jerusalem, 1995).

## **YEMEN**

Yemen's harvest of sorghum and millet is expected to be normal. Most people depend upon agriculture and pastoralism for their livelihoods; however, erosion and overgrazing are problems. As a result and given that only 3% of the land is arable, Yemen imports grain, especially wheat. Given the difficulties of production and a high population growth rate of 3.4%, around 36% of Yemen's population is undernourished (Committee on World Food Security. Assessment of the World Food Security Situation, FAO, 2001) with about 52% of children under age five experiencing stunted growth. A greater percentage of stunted children live in rural areas (56%) than in urban areas (40%). Thirteen percent of children under five years of age suffer from wasting, an indication of recent food shortages. Forty-six percent of Yemeni children are considered underweight. Twenty-five percent of Yemeni mothers were found to have nutritional deficits (Yemen Demographic and Maternal and Child Health Survey, 1997).